APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,846	09/12/2003	James Pierre	ABTT-0351/B020670	8535

23361   7590   03/18/2008

ABB INC.
LEGAL DEPARTMENT-4U6
29801 EUCLID AVENUE
WICKLIFFE, OH 44092

EXAMINER
FLEISCHER, MARK A

ART UNIT	PAPER NUMBER
4143	

MAIL DATE	DELIVERY MODE
03/18/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 September 2003*.
2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *1-17* is/are rejected.
7)☒ Claim(s) *1 and 9* is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☒ The drawing(s) filed on *17 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All b)☐ Some * c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date *17 October 2003 and 6 January 2005*.
4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____ .

DETAILED ACTION

Status of Claims

1. This action is in reply to the Application filed on 12 September 2003.

2. Claims 1–17 are currently pending and have been examined.

Information Disclosure Statement

3. The Information Disclosure Statements filed on 17 October 2003 and 6 January 2005 have been considered. An initialed copy of the Form 1449 is enclosed herewith.

Specification

4. Applicant is reminded of the proper language and format for an abstract of the disclosure. The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details. The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

5. The abstract of the disclosure is objected to because it exceeds the maximum length requirements. Correction is required. See MPEP § 608.01(b).

Claim Objections

6. Claim 1 is objected to because of the following informalities: the first limitation uses the phrase *that receives plural types of data....* This phraseology is non-standard and should be stated as *that receives a plurality of data types...* Other instances of the word *plural* are also present and should be changed. Appropriate correction is required.

7. Claim 9 is objected to because of the following informalities: the limitation uses the phrase "wherein different ones of said..." and is somewhat awkward. A better phraseology would be "wherein different instance of said..."

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claim 1 recites "the class of user" in the fourth limitation. There is insufficient antecedent basis for this limitation in the claim.

10. Claims 2–6 recite "the system recited in claim 1". There is insufficient antecedent basis for this limitation in the claim. In addition, these claims are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant refers to "a unified framework" in the preamble of independent claim 1, but refers to "the system" in its dependent claims.

11. Claim 11 recites "said classes of users". There is insufficient antecedent basis for this limitation in the claim.

12. Claim 12 recites "the classes of users". There is insufficient antecedent basis for this limitation in the claim.

13. Claims 15–17 recite "the method of claim 14". There is insufficient antecedent basis for this limitation in the claim. In addition, these claims are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject

matter which applicant regards as the invention. Applicant refers to "a system" in independent

claim 14, but refers to "the method" in dependent set of claims.

Claim Rejections - 35 USC § 101

14. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

15. Claim 1 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-

statutory subject matter. The preamble specifies "A unified framework for..." and does not fall

within one of the statutorily defined categories of patentable subject matter. Applicant is advised

to replace that phrase with "A system for..." as this will likely comport to the statutory

requirements of this section.

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness

rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

17. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966),

that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

> a) Determining the scope and contents of the prior art.
> b) Ascertaining the differences between the prior art and the claims at issue.
> c) Resolving the level of ordinary skill in the pertinent art.
> d) Considering objective evidence present in the application indicating obviousness or nonobviousness.

18. Claims 1–3, 7, 9–11, and 14–16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Young (20020038217 A1) and further in view of Sanders (US 6411936 B1).

Claim 1:

Young, as shown, describes and/or discloses the following limitations.

A unified framework for visually displaying real-time enterprise status information (Young, in at least [0019] states: "Contextual <u>visualization</u> interface [ ] enables a user <u>to view</u> various aspects of the a business. The visualization management service provides a lower level management capability aimed <u>at audiences where a bigger management</u> and <u>status picture</u> is required." (emphasis added) where 'visualization' corresponds to *visually displaying* and 'status picture' corresponds to *real-time enterprise status information.*) *over all levels of a corporate organizational structure of an enterprise* (Note in the aforementioned quotations that 'at audiences where a bigger ...' corresponds to *over all levels of a corporate...structure.*), *comprising:*

- *an application integration platform that receives plural types of data from manufacturing and information systems within said enterprise, said application integration platform analyzing said plural types of data to determine key performance indicators* (Young, in at least [0002] states: "The described <u>system and method</u> are generally related to software-implemented methods, systems and articles of manufacture <u>for analyzing</u>, managing and presenting business solutions. More specifically, the described system and method are related to systems and methods for analyzing, managing and presenting business <u>information from a variety of disparate sources.</u>" (emphasis added) where 'system and method' corresponds to *application integration platform* and 'information from ... disparate sources' corresponds to *receiv[ing] plural types of data from ... systems within...* and 'for analyzing' corresponds to *...analyzing said plural types...* Young further describes and/or discloses in at least [0006] the notion of "key performance indicators" that are "defined" hence, *determine[d].*);

- *a process control server* (Young, in at least [0029] states: "Preferrably, workflow support is for business processes executing under the control of and within a single server. Each running workflow server ..." (emphasis added) where the workflow server corresponds to *a process control server*.) *that receives manufacturing data from at least one work center* (Young, in at least [0003] refers to "enterprise application integration" and corresponds to *application integration platform*. Young, in at least [0016] states: "Other standardized applications [...] provide data to workflow manager [ ], such as, [...] manufacturing data. Workflow manager [ ] further receives information from a variety of defined trading partners [ ]. These trading partners may include customers, suppliers, distributors, and other remote business computers located throughout the enterprise." (emphasis added) where 'provid[ing] data to workflow manager' and 'manufacturing data' corresponds to a *server that receives manufacturing data* and 'receives information ...other remote ...computers ...' corresponds to *from at least one work center*.) *and forwards said manufacturing data to said application integration platform* (Note that in the aforementioned reference, 'provide data to workflow manager ... such as ... manufacturing data' corresponds to *forwards said manufacturing data to ...*);

- *a database containing information related to manufacturing processes performed at said at least one work center* (Young, in at least [0003] states: "These prior art solutions are directed toward the problems of integrating business data and processes stored on and performed by various systems throughout an organization." (emphasis added) where 'business data and processes' encompasses *manufacturing processes* and 'stored on' indicates such data is stored on a database 'system' as this is one of 'various systems'. Moreover, Young specifically refers to 'manufacturing data' as shown above.)*; and*

- *a graphical user interface that interfaces with said application integration platform to provide a visual display of said key performance indicators* (Young, in at least [0018]

devotes a subsection to the description of the "Contextual Visualization Interface" and "provides a <u>lower level management</u> capability <u>aimed at audiences</u> where a bigger management and status picture is required." ([0019]) where the management level and 'audiences' pertain to various types of users.) *in accordance with the class of user interacting therewith* (Young, in at least [0031] states: "This service uses <u>Key Performance Indicator</u> ("KPI") applications [ ] to allow <u>high-level users to visualize</u> and implement high-level policy directed toward monitoring their specific interests and needs." (emphasis added) where the 'high-level users' corresponds to *the class of user interacting..*),

Young does not specifically describe and/or disclose the following limitations, but Sanders, as shown, does.

- *wherein said levels of said corporate organizational structure are modeled as objects having methods and variables* (Sanders, in at least claim 33 states: "[T] he first set of <u>objects</u> includes elements that each <u>represent</u> points of <u>generation of knowledge</u>, speeds and spheres of communication of knowledge, <u>transformation methodology</u>, and distribution methodology of knowledge <u>within the same and between various business systems in the enterprise</u>." (emphasis added) where 'objects' are described as entities that 'represent' 'knowledge' and 'transformation methodology' that corresponds to *objects having methods and variables.*), *said objects being created using an organizational hierarchical structure* (Sanders, in at least [0023] states: "The problem is that <u>existing systems are based</u> either <u>on hierarchical models</u> [...] and not for the larger purpose of overall enterprise value enhancement." (emphasis added) where 'based [on] hierarchical models' corresponds to *using an organizational hierarchical structure.*) *of said enterprise to be monitored together with respective states and behaviors of components within each level of said corporate structure* (Sanders, in at least [0030] states: "[The] solution generator also <u>tracks the mix of products and/or services of the enterprise</u>. Pricing, gross margins, customer asset

valuations, and the <u>potential for movement</u> in each of the <u>areas tracked</u> are also preferably monitored by the solution generator." (emphasis added) where 'track the mix...' corresponds to the *monitor[ing] ... respective states and behaviors* where 'potential for movement' corresponds to *behaviors* and the 'mix ... of the enterprise' corresponds to the *components with ...[the] corporate structure.*).

Both Young and Sanders describe and/or disclose systems and/or methods that facilitate the management and control of large-scale enterprises. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to combine the teachings of Young and Bruce by adding the object oriented approach of Sanders to the methods of Young because it enables and facilitates the development, modification and application of enterprise monitoring.

Claims 2, 10 and 15:

Although claims 2, 10 and 15 are worded and/or structured slightly differently, they have the same scope and so are addressed together. Young/Sanders, as shown, describe and/or disclose the limitations of claim 1 as shown above. Young further describes and/or discloses the following limitations.

- *said key performance indicators include at least one of: throughput time, manufacturing hours, work center utilization, man-hour capacity, planned vs. actual hours for work orders, and work in process* (Young, in at least [0016] describes "statistics describing equipment use" and "custom manufacturing data". These correspond to *throughput time, manufacturing hours, man-hour capacity*. Further, in at least [0033] Young refers to "manufacturing orders", and in at least [0058] "applications in which <u>time keeping</u> is needed" hence corresponds to *manufacturing hours* and *work in process* as further described in at least [0015] where Young describes, in general terms, "Workflow manager [ ] further enables <u>business processes</u> to be managed according to <u>exception rules</u>. Workflow manager [ ] also supports <u>event identification</u>, <u>event correlation</u> and <u>event prediction</u> based on

historical parameters and <u>user-defined parameters</u>." (emphasis added) where the aforementioned 'events' and 'user-defined parameters' with respect to 'business processes' corresponds to the *work in process* and the other attributes relating to time and *planned vs. actual hours.*)

Claims 3, 11 and 16:

Although claims 3 and 11 are worded and/or structured slightly differently, they have the same scope and so are addressed together.   Young/Sanders, as shown, describe and/or disclose the limitations of claim 1 as shown above.   Young further describes and/or discloses the following limitations.

- *said key performance indicators are determined in accordance with at least one of a work order number, a work station identifier, a start time, an end time, an activity code, a problem code, employee information, a material code, a planned start time, and a planned completion time* (Young, in at least [0055] states: "[I]f an event regarding a <u>problematic manufacturing process</u> for part number 12345 is generated, the management policy might need to reference more information regarding what <u>other business processes</u> are affected by this situation--e.g. are there any sales orders or <u>manufacturing orders</u> depending on this part?" (emphasis added) where 'problematic…' corresponds to *a problem code* for example.   These are species of 'business data' as in [0005] where "<u>The business data is processed to determine</u> the <u>value of the key performance indicator,</u> […]." (emphasis added) hence the *key performance indicator[s] are determined* based on the 'business data' and therefore *in accordance with at least one of…*)

Claims 7 and 14:

Although claims 7 and 14 are worded and/or structured slightly differently, they have the same scope (the last limitation of claim 14 however is not included in the scope of claim 7 and is addressed below as indicated) and so are addressed together.   Young, as shown, describe and/or disclose the following limitations.

- *A system for visually displaying real-time enterprise status information* (Young, in at least [0032] states: "The KPI wizards allow the selection of discrete or aggregated object values to be <u>visualized and monitored</u>." (emphasis added) where 'visualized and monitored' corresponds to *displaying real-time enterprise status information*.) *over all levels of a corporate organizational structure of an enterprise* (Young, in at least [0019] states: "[I]t utilizes the [...] interface [...] with <u>business object model</u> that implements Business Process Views (BPV's) <u>representing the different aspects of an enterprise</u> such as <u>manufacturing, finance and human resources</u> [...]" (emphasis added) where 'different aspects' such as 'manufacturing...' corresponds to *all levels of a corporate ... structure of an enterprise.*), *comprising:*

Young does not describe and/or disclose the following limitations, but Sanders, as shown, does.

- *an object-oriented model of levels of said corporate organizational structure* (Sanders, in at least [0023] states: "Future <u>values of variables</u> can be determined by some existing enterprise models which <u>include flow relationships</u>, causal relationships, <u>compositional relationships</u> and productivity relationships besides reasoning and reconciliation to create a <u>realistic model of an enterprise</u>." (emphasis added) where 'flow relationships' and 'compositional relationships' correspond to *levels of a corporate organizational structure.* Also, in at least [0030] "<u>Pricing, gross margins, customer asset valuations</u>, and the potential for movement in each of the <u>areas tracked</u> are also preferably <u>monitored</u> by the solution generator." (emphasis added) where 'pricing ... valuations' corresponds to *enterprise status information* that are 'monitored' which corresponds to *real-time enterprise status.*), *said objects having methods and variables and being created using an organizational hierarchical structure of said enterprise such that respective states and behaviors of components within each level of said corporate structure are monitored together* (Sanders in at least [0023] states:

"The problem is that existing systems are based either on hierarchical models or

are meant to enable decision-making regarding resource allocation only, and not

for the larger purpose of overall enterprise value enhancement." (emphasis

added) hence refers to *an organizational hierarchical structure*. In Sanders claim

31 "[T]he model of the enterprise value enhancement includes flow relationships,

type relationships, causal relationships, function relationships, and solution

relationships, [...]." (emphasis added) where the emphasized text corresponds to

respective states and behaviors. Finally, as shown above in [0030] "Pricing,

gross margins, customer asset valuations, and the potential for movement in

each of the areas tracked are also preferably monitored by the solution

generator." (emphasis added) hence are 'monitored together'.);

Young further describes and/or discloses the following limitations.

- *an application integration platform* (Young, in at least [0003] refers to "Enterprise

  Application Integration") *that receives plural types of data from manufacturing*

  (Young in at least [0016] states: "Other standardized applications [...] provide

  data to workflow manager [ ], such as, [...] custom manufacturing data."

  (emphasis added) where the 'workflow manager' corresponds to the *application

  integration platform* that is 'provide[d]', hence *receives ... manufacturing data*.)

  and information systems (Young, in at least [0016] states: "[The] workflow

  manager [ ] may receive information from a variety of web services [that] may

  provide any type of data that may be located online [...]" (emphasis added)

  where 'variety of web services' and 'provide any ... data ... online' corresponds

  to *information systems*.) *within an enterprise via a network infrastructure* (Young,

  in at least [0014] states: "The relevant business data is collected from other

  sources in a number of ways, including for example [...] via a wide area network

  (WAN) or local area networks (LAN) connection, via batch processing and via a

  human operator." (emphasis added) where the 'WAN' and 'LAN' corresponds to

information systems within an enterprise via a network infrastructure.) and

analyzes said plural types of data in response to user inputs (Young, in at least

[0087] states: "Typically, key performance indicators will be <u>identified through</u>

<u>user input</u> [...]" and in [0088] "[T]he <u>business data is analyzed</u> to determine the

<u>value of the identified</u> key performance indicator." (emphasis added) where the

'identified...indicator' corresponds to that which comes from *user inputs* where

the resulting 'business data is analyzed' and corresponds to *analyzes ... plural*

types ... in response to user inputs.);

- *a process control server that receives manufacturing data from at least one work*

  center and forwards said manufacturing data to said application integration

  platform (Young, in at least [0016] states: "Other standardized applications [...]

  <u>provide data</u> to <u>workflow manager</u> [ ] such as, [...] <u>manufacturing data</u>. Workflow

  manager [ ] <u>further receives information</u> [...]" (emphasis added) where 'other

  standardized...' corresponds to *process control server* and 'workflow manager'

  corresponds to *application integration platform* which 'further receives...' hence is

  forward[ed] 'manufacturing data' which *ipso facto* is generated within the

  enterprise, hence from some *work center.*);

- *a database containing information related to manufacturing processes performed*

  at said at least one work center (Young, in at least [0016] refers to "applications

  ... provide data to [a] workflow manager [ ] such as [ ] manufacturing data"

  (emphasis added) where such 'data' must, *ipso facto* come from a *database*

  containing information related to manufacturing processes which are, *ipso facto*

  performed within the enterprise, hence at *..[a] work center.*); *and*

- *a user interface that displays the analyzed plural types of data to determine key*

  performance indicators (Young, in at least the abstract states: "The method also

  includes the step of <u>processing the business data to determine the value of at the</u>

  <u>key performance indicator</u>, The determined value of the key performance

indicator is <u>transmitted to a contextual visualization interface for presentation to a user</u>." (emphasis added) where the 'contextual visualization interface' corresponds to the *user interface* that allows a user to process data to *determine ...[a] key performance indicator.*), *wherein said at least one work center contains manufacturing machines, and a controller that receives sensor data from said machines and communicates said sensor data to said process control server* (Young, in at least [0016] states: "[N]etworked devices [ ] may <u>provide data</u> to <u>workflow manager</u> [...] describing <u>equipment use</u>, maintenance alerts and <u>equipment status</u> [...]" where 'networked devices' corresponds to *sensor[s]*, 'workflow manager' corresponds to *a controller that receives sensor data* and 'equipment use' and 'status' corresponds to *sensor data* which is *communicate[d]*.)

With respect to the limitation in claim 14 not within the scope of claim 7, Young, as shown, describes and/or discloses the following limitation:

- *presenting differing ones of said key performance indicators to different classes of end users in accordance with user-selected input parameters* (Young, in at least [0015] states: "Workflow manager [...] enables the definition of <u>key performance indicators</u> [...] Workflow manager [ ] further enables business processes <u>to be managed according to exception rules</u>. Workflow manager [ ] also supports event identification, event correlation and event prediction based on historical parameters and <u>user-defined parameters</u>." (emphasis added) where 'key performance indicators' corresponds to same and 'managed according to exception rules' indicates the indicators are given to specified groups or classes, and finally, 'user-defined parameters' corresponds to *user-selected input parameters*. Note that in [0005] such indicators are "<u>transmitted</u> to a contextual visualization interface for <u>presentation</u> <u>to a user</u>." (emphasis added) where 'presentation...' corresponds to *presenting differing ones ...*)

Both Young and Sanders describe and/or disclose systems and/or methods that facilitate the management and control of large-scale enterprises including manufacturing systems. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to combine the teachings of Young and Bruce by adding the object oriented approach of Sanders to the methods of Young because it enables and facilitates the development, modification and application of enterprise monitoring.

Claim 9:

Young/Sanders describe and/or disclose the limitations of claim 7 as shown above. Young further describes and/or discloses the following limitations.

- *different ones of said key performance indicators are presented to different classes of users interacting with said management system* (See the rejection of the immediately preceding limitation above from the referenced limitation of claim 14).

Both Young and Sanders describe and/or disclose systems and/or methods that facilitate the management and control of large-scale enterprises including manufacturing systems. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to combine the teachings of Young and Bruce by adding the object oriented approach of Sanders to the methods of Young because it enables and facilitates the development, modification and application of enterprise monitoring.

19. Claims 5, 6, 12, 13 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Young/Sanders as applied to claims 1, 7 and 14 above, and further in view of Anderson (US 20020091944 A1).

Claims 5 and 12:

Although claims 5 and 12 are worded and/or structured slightly differently, they have the same scope and so are addressed together. Young, as shown, describes and/or discloses the limitations of claim 1 as shown above. Young further describes and/or discloses the following limitations.

- *the classes of users include managers, engineers, and operators* (Young, in at least [0031] states: "This service uses Key Performance Indicator ("KPI") applications [ ] to allow <u>high-level users</u> to visualize and implement high-level policy directed toward monitoring their specific interests and needs." (emphasis added) where 'high-level users' corresponds to *managers* and *engineers*. Young does not specifically describe and/or disclose that *the classes of users include … operators,* but Anderson, as shown, does. Anderson, in at least [0004] states: "This situation has led to a realization that software is needed to assist <u>these operators</u> in monitoring and maintaining their enterprises." (emphasis added).

Young, Sanders and Anderson all teach systems and methods for enterprise management. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to combine the teachings of Young/Sanders with that of Anderson because using an object-oriented paradigm for modeling elements of an enterprise or corporate structure for use by different levels of users provides all the advantages of object oriented design to the realm of enterprise modeling, managing and monitoring.

Claims 6, 13 and 17:

Although claims 6 and 13 are worded and/or structured slightly differently, they have the same scope and so are addressed together. Young/Sanders, as shown, describe and/or disclose the limitations of claim 1 as shown above. Young further describes and/or discloses the following limitations.

- *one class of users is provided financial and manufacturing key performance indicators, wherein a second class of users is provided analysis capabilities, and a third class of users is provided key performance indicators for a supervised area and scheduling information* (Young, in at least [0014] states: "Workflow manager 110 may be employed <u>to provide</u> a number of business solutions related to, for example, supply chain management, <u>manufacturing optimization</u> …" (emphasis added) where 'to provide' and 'manufacturing optimization' corresponds to *provid[ing]*

...manufacturing ...performance indicators, since optimization, *ipso facto* requires

some performance metric. Young, in at least [0003] further states: "[N]one of the

prior art business management applications provide automated in-depth analysis of

the integrated business data." (emphasis added) where 'provide automated'

corresponds to *provid[ing] analysis capabilities* of 'business data'.)

Young/Sanders do not specifically describe and/or disclose the notion of providing

performance metrics and scheduling information *per se,* but Anderson, as shown, does.

Anderson, in at least [0004] states: "This situation has led to a realization that software is

needed to assist these operators in monitoring and maintaining their enterprises." (emphasis

added) and further, in [0005], "Other functions are sometimes performed by enterprise

management software, including scanning networks for compatible devices and agents, job

scheduling, backups, and system performance analysis and prediction." (emphasis added)

where 'software' 'assists' 'operators' and corresponds to a *third class of users* and 'performed

by ...' corresponds to *provid[ing]* and 'job scheduling' and 'performance analysis' corresponds

to *performance indicators and scheduling information.*

Young, Sanders and Anderson all teach systems and methods for enterprise

management. Therefore, it would have been obvious to one with ordinary skill in the art at

the time of the invention to combine the teachings of Young/Sanders with that of Anderson

because using an object-oriented paradigm for providing certain types of information relevant

to the management of an enterprise or corporate structure and for use by different classes of

users provides all the advantages of object oriented design to the realm of enterprise

modeling, managing and monitoring.

20. Claims 4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Young/Sanders

as applied to claims 1 and 7 above, and further in view of Cheng (US 6067548 A).

Claims 4 and 8:

Although claims 4 and 8 are worded and/or structured slightly differently, they have the same

scope and so are addressed together. Young/Sanders, as shown, describe and/or disclose

the limitations of claims 1 and 7 as shown above. Young/Sanders do not describe and/or

disclose the following limitations, but Cheng, as shown, does.

- *objects modeling respective components of a first part of said corporate structure are*

  reusable to model components of a second part of said corporate structure (Cheng,

  in at least [0017] states: "The utility also includes means for <u>mapping the member</u>

  <u>objects</u> to the <u>objects within the enterprise</u> [...]" (emphasis added) where the

  'mapping...' corresponds to an object model of an 'enterprise entity' (see also Cheng

  claim 21). Also, in at least [0039], Cheng refers to model reuse: "With this design,

  attribute definitions can be <u>reused in different organizations</u>.")   Furthermore,

  Examiner takes **Official Notice** that it is old and well-known as well as commonplace

  in the computer modeling arts that one of the most advantageous aspects of object

  modeling is that objects can be reused in other applications or contexts saving a

  great deal of time and expense by enabling code reuse.

Therefore, it would have been obvious to one with ordinary skill in the art at the time of the

invention to combine the teachings of Young/Sanders with that of Cheng because using an

object-oriented paradigm for modeling elements of an enterprise or corporate structure

provides all the advantages of object oriented design to the realm of enterprise modeling,

managing and monitoring.

Conclusion

Any inquiry of a general nature or relating to the status of this application or concerning this communication or earlier communications from the Examiner should be directed to Dr. **Mark A. Fleischer** whose telephone number is **571.270.3925.** The Examiner can normally be reached on Monday-Friday, 9:30am-5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, **James A. Reagan** whose telephone number is **571.272.6710** may be contacted.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://portal.uspto.gov/external/portal/pair <http://pair-direct.uspto.gov >. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866.217.9197** (toll-free).

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to **571-273-8300**.

Hand delivered responses should be brought to the **United States Patent and Trademark Office Customer Service Window**:

Randolph Building

401 Dulany Street

Alexandria, VA 22314.

Mark A. Fleischer, Ph.D.
/Mark A Fleischer/
Examiner, Art Unit 4143
10 March 2008
/James A. Reagan/Supervisory Patent Examiner, Art Unit 4143